Abstract

In the symbolic dynamic, the principal problem to define a symbolic sequence of temporal time series is the use of an appropriate partition of the phase space trajectory data set. In fact, the best way is to estimate the generating partition. However, it is not possible to find generating partitions for most experimental observations because such partitions do not exist when noise is present. In this paper, different partition methods applied for stochastic and chaotic system will be compared in order to choose the coherent one to conserve system dynamical propriety. This partition is called the Markov partition.

References

Different Methods of Partitioning the Phase Space of a Dynamic System


**Index Terms**

Computer Science

Information Sciences

**Keywords**

Markov Partition  Generating Partition  Symbolic Sequence  Entropy Rate